

## A UNIQUE ROLE IN THE NATION'S RESEARCH EFFORT

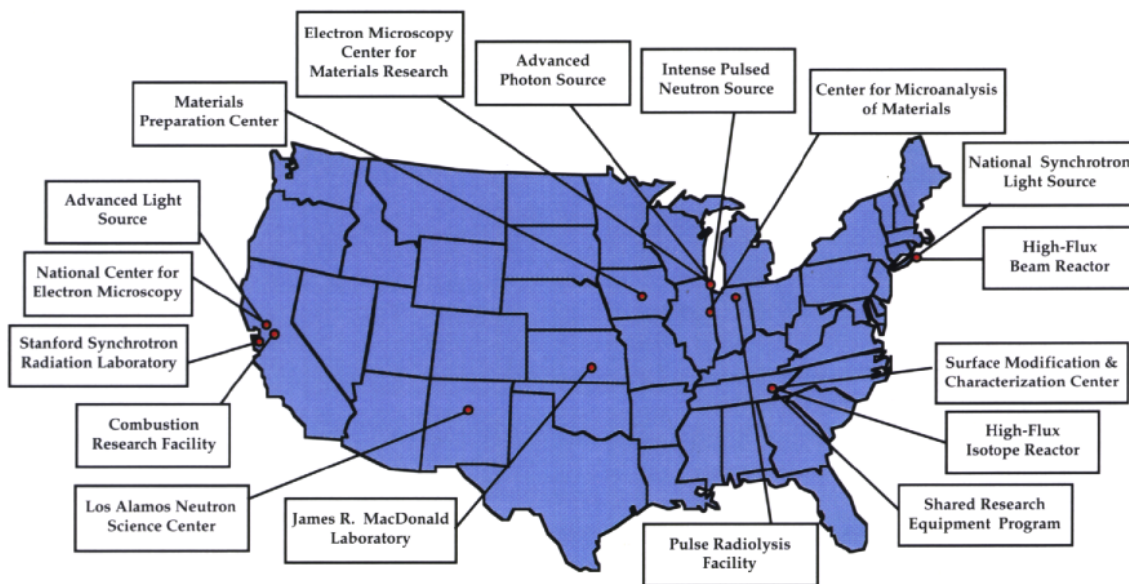
BES is uniquely responsible for basic research in the natural sciences leading to new and improved energy technologies. BES supports fundamental research in areas related to energy resources, production, conversion, and efficiency and to the mitigation of the adverse impacts of energy production and use. Through its diversified portfolio and system of laboratory and university programs, BES promotes interdisciplinary research and the integration of basic and applied science. Encompassing more than 2400 researchers in 200 institutions nationwide, the program includes extensive interactions at the interagency, national, and international levels, as well as over 800 collaborations with industry.

BES is responsible for the planning, construction, and operation of many of the Nation's most sophisticated research facilities, including third-generation synchrotron light sources and high-flux neutron sources as well as specialized facilities for micro-characterization, materials synthesis, combustion research, and ion beam studies. These facilities are unmatched in the world in breadth of capabilities and numbers of scientific users. BES facilities have an enormous impact on science and technology, ranging from determinations of the structure of superconductors and biological molecules to the development of wear-resistant prostheses, from

atomic-scale characterization of environmental samples to elucidation of geological processes, and from the production of unique isotopes for defense applications and cancer therapy to the development of new medical imaging technologies.



**The Advanced Photon Source at Argonne National Laboratory is the nation's most intense synchrotron x-ray source.**



**BES research facilities serve over 4500 researchers from universities, industry, and government laboratories each year.**